### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

### WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-020064 Address: 333 Burma Road **Date Inspected:** 10-Mar-2010

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Yes Liu Hua Jie, Lu Li Qing, Geng W. W. Present: No Yes N/A Yes **Inspected CWI report:** No **Rod Oven in Use:** No

**Electrode to specification:** Yes No N/A Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No

Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** Orthotropic Box Girder (OBG)

#### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Amit K. Juvekar, was present during the times noted above for observations relative to the work being performed.

Training for Phased Array Ultrasonic Testing.

This QA inspector attended Training for Phased Array Ultrasonic Testing (PAUT) from 1600Hrs. to 1900Hrs.

This QA Inspector observed the following work in progress:

Assembly, Bay 14, 12AW.

During Random Visual in process Inspection, this QA inspector observed Crack like indications at Side plate to bottom plate welds in Back gauged area in Segment 12AW. Welds are identified as SEG3004A-010, 06. This QA inspector informed ZPMC Quality control (QC) Inspector about this. ZPMC NDT personnel performed Magnetic Particle Testing (MT) on above mention welds & confirmed all the indications. ZPMC QC "Liu Hua Jie" agreed remove all the indications before welding.

Assembly, Bay 14, 12AW, Bottom Plate to Side Plate.

SMAW welding of weld joint SEG3004A-004; located on assembly, Bay 14, 12AW. Welder is identified as 66258; ZPMC Quality Control Inspector (QC) is identified as Liu Hua Jie. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2214-B-U2-FCM-1.

N/A

### WELDING INSPECTION REPORT

(Continued Page 2 of 4)

Assembly, Bay 14, SEG072, 11DE.

FCAW welding of weld joint SSD16-PP104-024, 025; located on assembly, Bay 14, 11DE. Welder is identified as 058551; ZPMC Quality Control Inspector (QC) is identified as Geng Wei. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2231-TC-U4C-F.

This QA Inspector carried out NDE on following

Subassembly, Bay 19, OBG Suspender Brackets.

This QA inspector performs Random Magnetic Particle Testing (MT) of approximately 15% area previously tested and accepted by ZPMC Quality Control personnel (Notification # 005302). This QA Inspector generated an MT report (TL-6028) for this date. The members are identified as 1)SB008-046-025, 031, 037, 043, 049, 055, 061, 067, 011, 018, 001, 004, 005, 007, 008, 019, 020. 2)SB008-046-006, 077, 017, 009, 010, 012 TO 016, 026, 032.

Subassembly, Bay 14, OBG STIFFNER.

This QA inspector performs Random Magnetic Particle Testing (MT) of approximately 15% area previously tested and accepted by ZPMC Quality Control personnel (Notification # 005301). This QA Inspector generated an MT report (TL-6028) for this date. The members are identified as

1)CA061.

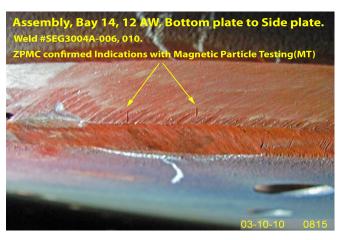
2)CA089.

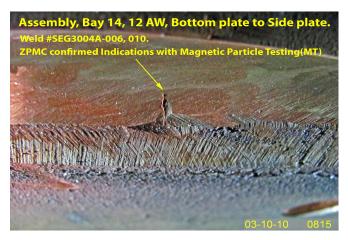
3)CA091.

4)CA091.

5)SEG51D.

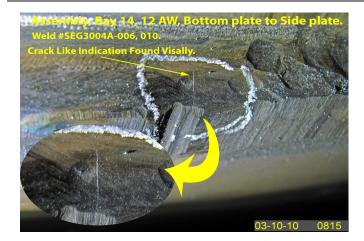
Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

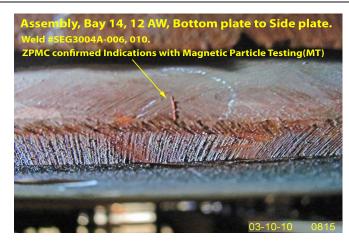




# WELDING INSPECTION REPORT

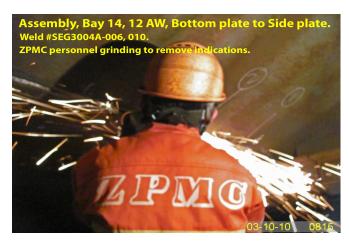
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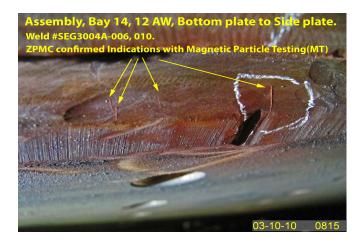






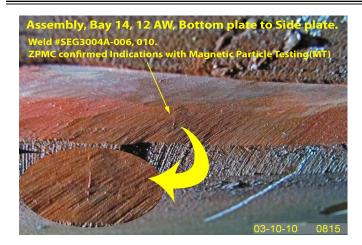






# WELDING INSPECTION REPORT

(Continued Page 4 of 4)



## **Summary of Conversations:**

No relevant conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 1500.042.2372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Juvekar,Amit	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer